

From: Peter Moyle <pbmoyle@ucdavis.edu>
Sent: Thursday, August 30, 2018 11:35 AM
To: Delta Council ISB
Subject: Draft ecosystem prospectus on non-native species

This is a good prospectus on an important topic. Some comments:

- a. Define your terms early in the review. Invasive species are not the same as non-native species, for example. I would reserve the term for species that are harmful and are expanding or have high potential to expand their ranges in CA. A new term may be needed for once invasive species that may once have been harmful but are now thoroughly integrated into CA ecosystems (e.g., striped bass). Non-native resident species?
- b. Investigate the concept of 'novel ecosystem' and how well it defines the present Delta ecosystem. The Delta has got to be one of the most altered ecosystems in the world, with a much higher biodiversity than it once had, thanks to additions of non-native species. This is also a good context to incorporate reconciliation ecology.
- c. A topic not directly mentioned is having sufficient information to know when it is worth the effort to control non-native- or even native – species that have become perpetual problems, especially aquatic weeds. When is the cure worse than the disease?

I would also like to mention that I am starting a project, funded by DWR, to look at the history, ecology and management of striped bass in the San Francisco Estuary. This study should be relevant to this review.

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